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Michelle M. Scordato

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Michelle M. Scordato

Signature

March 14, 2007

Date of Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: James Botelho

Application No.: 10/825,989

Filed: April 16, 2004

For: Dual Overhead Camshaft V-2 Engine

STATUS INQUIRY

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please advise as to the status of the above-identified application. The last communication in this application was an Examiner's Answer received December 21, 2005 (copy enclosed).

Thank you for your prompt attention in this matter.

Respectfully submitted,

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By:

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Dated: March 14, 2007



UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/825,989  
Filing Date: April 16, 2004  
Appellant(s): BOTELHO ET AL.

**MAILED**

**DEC 19 2005**

**Group 3700**

\_\_\_\_\_  
David L. Principe  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/18/05 appealing from the Office action mailed 5/4/05.

Art Unit: 3747

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4671216

Itoh

6-1987

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3747

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh (4671216). Figures 3-5 show offset finned cylinders/blocks with DOHC including two intake and exhaust valves. The cylinders appear are arranged at 70 degrees. The crankcase is not disclosed as mounting to front and rear EVO mounts/drives.

While the cylinders are disclosed as being at 70 degrees, the figures actually show them to be around 45 degrees; it would have been obvious to one of ordinary skill in the art to arrange the cylinders at any angle desired for fitting within a motorcycle frame. The present specification admits (page 1) "many aftermarket engine manufacturers produce their designs based on this EVO mounting configuration"; therefore it would have been obvious to one of ordinary skill in the art to modify Itoh to fit onto stock EVO crankcase mounts/drives so as to reach a wide market.

#### **(10) Response to Argument**

The applicants argue 1) that the engine of Itoh could not fit into the stock EVO platform because the physical dimensions would not allow a front and rear motor mount to mate with the EVO engine mounting locations; and 2) the output is a driveshaft to the rear wheel which would not conform to the EVO drive train design. Modifying Itoh to fit would destroy the reference because the reference comprises an integral transmission with a drive shaft whereas the EVO engine uses a chain drive. 3) There is no teaching in Itoh to suggest modifying the engine to fit an EVO platform and that the background statement that aftermarket engines built to fit EVO platforms is insufficient. 4) While Itoh shows an angle of around 45 degrees between cylinders, the specification repeatedly discloses an angle of only 70 degrees.

The examiner contends that 1) there is nothing about the engine/transmission of Itoh that prevents the engine from being modified to fit an EVO platform; one of ordinary skill in the

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art could always modify the shape and size of the engine housing to fit into the motorcycle frame and receive bolts to be secured thereto. It is well settled that changes of shape and size are matters of design choice. 2) The engine of Itoh does indeed use a drive shaft (figure 7). The output uses a bevel gear. However, nowhere in the disclosure is it stated that the output shaft is deemed critical. Indeed, there is no discussion at all. Both chain drives and drive shafts are well known and deemed obvious equivalents. Using a chain drive would not destroy Itoh. 3) The examiner contends that the background statement is sufficient to suggest modifying any engine, subject to profitability. The background statement of widespread production of aftermarket engines for the EVO platform is proof of high demand. 4) The examiner agrees that Itoh contemplates 70 degrees as the best mode. However, there is no statement indicating the criticality of 70 degrees. Merely, that it is more compact than a 90-degree engine. Therefore, if one of ordinary skill in the art wanted an even more compact engine, one would make the angle even smaller, including 40-50 degrees. The 70 degree engine is merely shown "for purposes of example" (col.2, line 30-36).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Noah Kamen



Noah P. Kamen  
Primary Examiner

Conferees:

Mike Argenbright



Willis Wolfe



Henry Yuen

